Skills Hiring Companies Look for in Industrial Engineers

by: Steve Snelling

You've completed your bachelor's or master's degree in ISE, and you have internship or co-op experience under your belt. You've proven yourself to be a dependable worker, but are you ready to secure your first job? When hiring Industrial & Systems Engineers, many companies are looking for both skills taught in the classroom and general skills beyond that set. Focus on fostering the following skills to gain a competitive advantage in your job search.

Ability to apply ISE Fundamentals:

- Production Control
- Inventory Control
- Process Analysis
- Facility Planning
- Material Handling
- Statistical Analysis

Strong grounding in Engineering Fundamentals:

- Basic Design
- Strength of Materials
- Thermodynamics
- Electrical Theory
- Applied Physics
- Machining

Communication & Inter-personal skills:

- Success in working with cross-functional team skills
- Ability to work well with others
- Ability to communicate ideas through technical writing. You should be able to write documentation and reports that are clear, logical, and grammatically correct.
- Ability to present ideas to diverse audiences. This requires good communication skills, including the ability to prepare and give presentations, to actively listen, to discuss a range of topics with a variety of people.
- Ability to establish a rapport with a variety of people, from shop personnel to senior management

Project Management skills:

- Ability to develop Objectives, Scope, Work plan, and Schedule
- Lean/Six Sigma analysis skills

Analytical skills:

- Proficiency in doing investigations and Root Cause Analysis
- Internet research skills

- Methods improvement skills
- Standard Data development and conducting Time Studies
- Cost Analysis, Return-On-Investment (ROI), and Cost Estimating skills for analyzing alternative solutions

Computing skills:

- MS Office: Outlook, Word, Excel, Access
- MS Project
- Statistical software
- Electronic layout/drafting skills, like AutoCAD
- Simulation software & electronic comparison analysis